

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An electrode ~~of~~for an alkaline fuel cell, the electrode comprising: ~~an insulating frame comprising:~~

an insulating frame, comprising a plurality of ports configured to feed and discharge reagents;

a mesh current collector embedded in the frame and having lead-outs extending beyond the frame; and

an active layer and a barrier layer sequentially applied onto the mesh current collector,

wherein sites of the embedment of the current collector and the lead-outs in the frame, edges of the current collector and the lead-outs in sites of the embedment into the insulating frame are impregnated with a lacquer solution, and a periphery of the current collector along an inner edge of the insulating frame includes a sealing layer.

2. (Previously Presented) The electrode according to claim 1, wherein the sealing layer is made of an electrolyte non-wettable substance.

3. (Previously Presented) The electrode according to claim 2, wherein the sealing layer is formed from fluoroplastic.

4. (Currently Amended) A method of producing an electrode ~~of~~for an alkaline fuel cell, the electrode comprising an insulating frame, including a plurality of ports configured to feed and discharge reagents, the electrode further comprising a mesh current collector embedded in the frame and having lead-outs extending beyond the frame, and an active layer and a barrier layer sequentially applied onto the mesh current collector, wherein edges of the current collector and the lead-outs in sites of the embedment into the insulating frame are impregnated with a lacquer solution, and a periphery of the current collector along an inner edge of the insulating frame includes a sealing layer, the method comprising:

producing a mesh current collector including lead-outs;

sequentially applying an active layer and a barrier layer onto the mesh current collector;

embedding the current collector into an insulating frame;
prior to the application of the active and barrier layers onto the current collector,
impregnating edges of the current collector and the lead-outs in sites of the embedment
into the insulating frame with a lacquer solution; and
after the embedding of the current collector into the insulating frame,
impregnating a periphery of the current collector along an inner edge of the insulating
frame with the lacquer solution to form a sealing layer.

5. (Previously Presented) The method according to claim 4, further comprising:
using a solvent wetting the mesh current collector as a solvent for the lacquer; and
evaporating the solvent, wherein the lacquer is a substance which forms a
continuous, electrolyte non-wettable film after evaporating the solvent.